UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,205	08/04/2005	Peter Eduard Neerincx	ARSI-006	3209
	7590 07/20/200 ACO CORPORATIO	EXAMINER		
	AL DEPARTMENT	NICHOLS II, ROBERT K		
RALEIGH, NC	MPUS DRIVE 27606		ART UNIT	PAPER NUMBER
			3754	
			NOTIFICATION DATE	DELIVERY MODE
			07/20/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketadministrator@mwv.com

		Application No.	Applicant(s)				
Office Action Summary		10/518,205	NEERINCX ET AL.				
		Examiner	Art Unit				
		ROBERT K. NICHOLS II	3754				
Period fo	The MAILING DATE of this communication apport	pears on the cover sheet with the c	orrespondence address				
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLEMENTED IS LONGER, FROM THE MAILING DISTRICT IS LONGER, FROM THE MAILING DISTRICT IS LONGER, FROM THE MAILING DISTRICT IS LONGER IS LONGER IN THE MAILING DISTRICT IS LONGER IN THE MAILING DISTRICT IS LONGER IN THE MAILING DEPLY WILLIAM THE MAILING T	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)	Responsive to communication(s) filed on <u>04 N</u>	May 2000					
-	This action is FINAL . 2b) ☐ This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
٥/ك	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	·	=					
Dispositi	on of Claims						
4)🛛	4)⊠ Claim(s) <u>1-3,6-10,12,13,16-20 and 22-27</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)🖂	6)⊠ Claim(s) <u>1-3,6-10,12,13,16-20 and 22-27</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)	Claim(s) are subject to restriction and/c	or election requirement.					
Applicati	ion Papers						
	The specification is objected to by the Examine	er					
•	The drawing(s) filed on is/are: a) ☐ acc		Examiner.				
.0/							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) 🔲 Notic 3) 🔯 Infori	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 11/09/2005.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte				

DETAILED ACTION

Response to Amendment

This office action is responsive to the amendment filed on 05/04/2009. As directed by the amendment: claims 1-3, 6-10, 16, 18 and 19 have been amended, claims 4, 5, 11, 14, 15 and 21 have been cancelled, and new claims 23-27 have been added. Thus, claims 1-3, 6-10, 12, 13, 16-20 and 22-27 are presently pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2, lines 1-2 recite "a thickness of flexible wall is greater than the thickness of the turned back edge." In figures 1A-4B of applicant's drawings the thickness of the turned-back edge 27 appears to be greater than the thickness of the flexible wall 5.

Appropriate correction required

Application/Control Number: 10/518,205 Page 3

Art Unit: 3754

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-10, 12, 13, 16, 18-20 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Andris (US 5,205,441).

Regarding claims 1, 7 and 20, Andris discloses a pump assembly including; a bellows part 3 having a flexible wall, a thickened base 12 at one end of the flexible wall; a turned-back edge 50 at an opposite end of the flexible wall; a cylindrical pressure valve 18 adjacent the thickened base 12 at one end of the flexible wall; and a suction valve 59 encircled by the turned-back edge 50; a co-acting part 2 including a top portion (top portion of wall 41) and an outer wall 40 (see fig. 2); wherein the turned-back edge 50 of the bellows part 3 rests on the top portion of the co-acting part 2 and the bellows part 3 co-operates with the co-acting part 2 (see figures 1 and 2).

Regarding claim 2, Andris discloses a thickness of the flexible wall is greater than the thickness of the turned-back edge 50 (i.e. portion 12; see figure 2).

Regarding claim 3, Andris discloses the turned-back edge 50 being arranged on an outer end thereof (see figure 2).

Regarding claims 8, 9 and 10, Andris discloses the flexible wall includes a bend, a concave and convex cross-section (see figure 1).

Regarding claim 12, Andris discloses the bellows part 2 includes a material selected from the group consisting of a thermoplastic polymer and an elastomer (see column 4, lines 27-34).

Regarding claim 13, Andris discloses the flexible wall of the bellows part 3 being substantially cylindrical (see figures 1 and 3).

Regarding claim 16, Andris discloses the valve 59 further includes three legs 51 connected to the turned-back edge 50 (see figure 3).

Regarding claim 18, Andris discloses the suction valve 59 further includes a guide protrusion 54 (see figures 1 and 2).

Regarding claim 19, Andris discloses the cylindrical pressure valve 18 includes a cylindrical flexible wall 15 (see figure 1).

Regarding claim 23, Andris discloses the turned-back edge 50 further includes a thickened edge and wherein the thickened edge rests on the top portion of the co-acting part 2 (see figure 2).

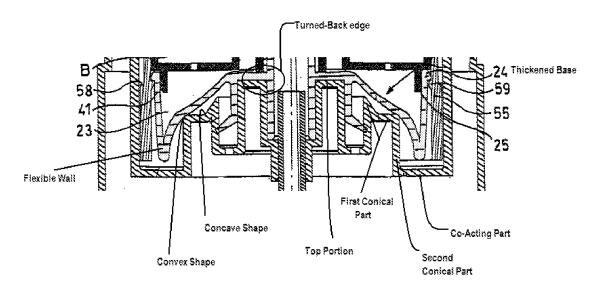
Claims 1, 6, 7, 20, 22 and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Bistolfi (EP 1 199 105).

Regarding claims 1, 7 and 20, Bistolfi discloses a pump assembly including; a bellows part having a flexible wall 22, a thickened base 24 at one end of the flexible wall; a turned-back edge (portion of fig. 3) at an opposite end of the flexible wall 22; a cylindrical pressure valve 63 adjacent the thickened base 24 at one end of the flexible wall (fig. 5); and a suction valve 46 encircled by the turned-back edge; a co-acting part 8

Application/Control Number: 10/518,205

Art Unit: 3754

including a top portion and an outer wall (see portion of fig. 3); wherein the turned-back edge of the bellows part rests on the top portion of the co-acting part 8 and the bellows part co-operates with the co-acting part 8 (see figure 2 and portion of figure 3).



Portion of Figure 3

Regarding claim 22, Bistolfi discloses the rolling and unrolling of the bellows part over at least a portion of the co-acting part 8 (see figure 3).

Regarding claims 6, 24 and 25, Bistolfi discloses the outer wall of the co-acting part 8 being conical having first and second conical parts (portion of figure 3); the first conical part includes an angle of inclination which is different than an angle of inclination of the second conical part (see portion of figure 3).

Regarding claims 26 and 27, Bistolfi discloses the first conical part includes a concave shape and convex shape (see portion of figure 3 above).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andris (US 5,205,441) as applied to claims 1-3, 7-10, 12, 13, 16, 18-20 and 23 above, further in view of Santagiuliana (US 6,715,649).

Regarding claim 17, Andris discloses all the elements of the claimed invention except the legs being Z-shaped.

Santagiuliana teaches a delivery pump having a suction valve including three legs or tags 20 being Z-shaped allowing the central portion 21 of the valve to rise during the liquid suction phase (see figure 3).

Thus, one of ordinary skill in the art would recognize that the known option of forming the legs being Z-shaped involves only routine skill in the art, for the predictable result of allowing valve displacement during the liquid suction phase.

Response to Arguments

Applicant's arguments submitted under "Remarks" in the response filed on 05/04/2009 have been fully considered but are moot in view of the new rejections made in this action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gamadia (US 4,220,264), Andris (US 5,014,881), Birmelin (US 5,042,694) and Peterson et al. (US 5,518,147) show other devices.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT K. NICHOLS II whose telephone number is (571)270-5312. The examiner can normally be reached on Mon-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/518,205 Page 8

Art Unit: 3754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. K. N./ Examiner, Art Unit 3754 /Kevin P. Shaver/ Supervisory Patent Examiner, Art Unit 3754